

What is claimed is:

1. A software system for enabling remote data access to and task execution
5 on a data processing system through a proxy server comprising:

an instance of the software residing on the data processing system
for receiving and analyzing requests and performing according to request
directive; and

an instance of the software residing on the proxy server for
10 identifying and authenticating a user and for redirecting requests to the data
processing system;

characterized in that a user connects to a network accessible to the
data processing system and initiates a request for services, wherein the
request is after authentication of the user, redirected from the proxy server
15 to the data processing system for task execution and possible return of
results according to the contents of the request.

2. The software system of claim 1 wherein the data processing system is a
personal computer.

3. The software system of claim 1 wherein the data processing system is a
multi-purpose printing center.

4. The software system of claim 1 wherein the data processing system is a
25 computer-connected peripheral.

5. The software system of claim 1 wherein data access includes directory
search and opening of a target file.

6. The software system of claim 1 wherein tasks performed include sending e-mails and electronic faxes.

5 7. The software system of claim 6 wherein tasks performed further include reading a document over a dialed telephone connection.

8. The software system of claim 6 wherein tasks performed further include powering on or off of host-connected devices.

10 9. The software system of claim 1 wherein the proxy server is a wireless gateway in a wireless data network.

15 10. The software system of claim 9 wherein the proxy server is accessed with a wireless network-capable device.

11. The software system of claim 10 wherein the access device is a WAP enabled cellular phone.

20 12. The software system of claim 1 wherein a request specifies a serial execution of serial tasks and return of results.

13. The software system of claim 1 wherein many requests are sent to the data processing system in an un-interrupted data session.

25 14. A software proxy agent residing in a data processing system and interfaced operationally to at least one software application of the system comprising:

a request analyzer for parsing and verifying received requests;
a request processor for processing the request for task-performance instructions;

at least one application program interface for enabling remote
5 control of the at least one application; and

a results processor for computing and/or compiling results;

characterized in that the agent, through the appropriate application
program interface, executes the appropriate application to achieve the goal
or goals specified in the request and wherein result or results of the
10 application performance are returned to the user that initiated the request.

15. The proxy agent of claim 14 wherein the data processing system is a
personal computer.

15 16. The proxy agent of claim 14 wherein the data processing system is a
multi-purpose printing center.

17. The proxy agent of claim 14 wherein the data processing system is a
computer-connected peripheral.

20 18. The proxy agent of claim 14 wherein the at least one application
includes an e-mail application, a word processing application, a facsimile
application, a telephony application, and an operating system component
application.

25 19. The software application of claim 14 wherein the request analyzer, the
request processor and the results processor utilize resident processing
capability of the host device.

20. A method for remote control of a data processing system over a network by proxy comprising steps of:

- a) connecting to the network using a network capable device;
- 5 b) logging into a proxy server and authenticating for access;
- c) formulating and sending a request directed to the data system to be controlled;
- d) forwarding the request from the proxy server to a proxy agent at the data system;
- 10 e) performing at least one task specified in the request; and
- f) returning results of task performance to the request initiator.

21. The method of claim 20 wherein in step (a) the network capable device is a wireless, WAP enabled phone and the network is the Internet network.

22. The method of claim 20 wherein in step (b) the proxy server is a gateway between the wireless network and the Internet.

23. The method of claim 20 wherein in step (e) the at least one task is performed through application program interface between the proxy agent and the specified application.

24. The method of claim 20 wherein in step (e) the at least one task is performed by an operating system component of the data processing system.

25. The method of claim 20 wherein in steps (a) through (e) are conducted repeatedly in the course of a single data session between a user and the data system.